

B.Sc. Semester - 6 (NEP-2020) Examination**March/April-2026****Introduction to Cyber Security (Ability Enhancement Course)****Time: 1:00 Hours****Marks:25****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Que.1 Answer the Followings (Any Two) (10)

- 1) Explain Confidentiality, Integrity, Availability (CIA) Triad in detail.
- 2) Explain the importance and real-world applications of cybersecurity.
- 3) Describe the stages of the ethical hacking process.
- 4) Explain Payload, Malware and Exploit in detail.

Que.2 Answer the Followings (Any Two) (10)

- 1) Explain cryptography and its importance in cybersecurity.
- 2) Differentiate between Symmetric and Asymmetric Encryption.
- 3) Explain MD5 and SHA Family algorithms in detail.
- 4) Define Packet Capture. Explain the working of packet capture tools like Wireshark.

Que.3 Answer the Followings (Any One) (05)

- 1) Define a Hacker. Explain any four types of hackers.
- 2) Explain how TCP, HTTP, and ICMP protocols can be analyzed using Wireshark.
